

IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

ADVANCED INSTRUCTIONAL SYSTEMS, )  
INC., d/b/a WEBASSIGN, )  
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Plaintiff, )  
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                                  )  
v. )                              1:15CV858  
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COMPETENTUM USA, LTD., )  
                                  )  
                                  )  
Defendant. )

**MEMORANDUM OPINION AND ORDER**

**OSTEEN, JR., District Judge**

Advanced Instructional Systems, Inc. ("AIS") has brought suit against Competentum USA, Ltd. ("Competentum"), for theft of trade secrets, copyright infringement, and computer trespass among others.<sup>1</sup> (See First Amended Complaint ("First Am. Compl.") (Doc. 10).) AIS does business as, and is the developer and owner of WebAssign, a proprietary software suite used by universities and other educational institutions to remotely assign and grade problems in topics such as math, chemistry, and physics. Essentially, AIS alleges that Competentum gained access to its private servers through contracting relationships it and its

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<sup>1</sup> Plaintiffs also allege state law claims of conversion and unfair and deceptive trade practices, however, given that those are not discussed in their TRO motion, they are not addressed here.

predecessor entered into with AIS, and that it later used that access to steal and/or reverse engineer proprietary software code contained on that server. AIS contends that Competentum did this in order to develop its own rival version of WebAssign, which AIS believes that Competentum wants to sell to Cengage Learning, Inc. ("Cengage"), one of WebAssign's biggest customers.<sup>2</sup> AIS argues that the grant of a Temporary Restraining Order ("TRO") and Preliminary Injunction is necessary to prevent the deployment of Competentum's rival software platform, the loss of Cengage as a client, and irreparable damage to their business interests.

This court finds that AIS has met the requirements for a TRO. AIS has advanced evidence that (1) Competentum or employees acting on Competentum's behalf have repeatedly and systematically accessed AIS's secured server; (2) Competentum has admitted to this access; (3) Competentum is working on releasing a rival software suite similar to WebAssign; and (4) planning materials found on the internet that involve the development of this rival platform reference WebAssign's

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<sup>2</sup> AIS alleges that Cengage has made overtures to acquire AIS on multiple occasions specifically in order to acquire WebAssign, and has been rebuffed, apparently motivating Competentum to start down the current path in order to take advantage of that opportunity.

proprietary software architecture as well as terminology found only in its proprietary Grading Statements, located on the secure server.

**I. FACTS**

WebAssign is an employee-owned benefit corporation organized under Virginia law, whose business provides online instructional systems software that allows teachers to deploy assignments and tests that are graded automatically. (See First Am. Compl. (Doc. 10) ¶ 8). WebAssign uses proprietary software of its own design in its grading engine, consisting in relevant part of two components, known as "Parser" and "Grading Statements," respectively, both of which are written in a programming code known as Perl. (Id. ¶¶ 13, 15.) Parser is a software component that translates a user's given answer into a format that can be read by WebAssign's third-party algebra systems, and was developed over the course of 18 years. (Id. ¶¶ 17-19.) According to AIS, the code for parser is not available even on their secured server,<sup>3</sup> and is made available only to a small number of WebAssign employees. (Id. ¶ 18.) A

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<sup>3</sup>WebAssign operates under a system whereby they utilize a public outward facing server that contains the version of WebAssign utilized by universities, and a private, inner facing "editing" server, which is secured and allows users to modify or edit sections of the software code.

Grading Statement is a set of software instructions, again written in Perl, which completes the assessment of a given answer by combining the output given by Parser with the correct answer from an answer key and grading accordingly. (Id. ¶ 20.) Grading Statements are copyrightable and original, and according to WebAssign, have been developed over the course of many years. (Id. ¶ 21.) The code for the Grading Statements is not available publicly (and according to AIS, the code for a Grading Statement is not readily ascertainable through independent development.) (Id. ¶ 23.) The code for the Grading Statements is, however, available on the secured server. (Id. ¶ 27.)

In 2006, WebAssign contracted with a predecessor of Competentum, named Open Teach Software, Inc. ("Open Teach"), and all work was completed under that contract in January 2009. WebAssign contracted with Competentum in January 2012 and in March 2012, and all work was completed under those contracts by August 2012. (First Am. Compl. (Doc. 10) ¶¶ 29-35.) During the course of this contracting, employees of both Open Teach and Competentum were given access credentials to WebAssign's secured server, access that WebAssign contends was limited by the terms of their agreements to the specifically defined work and were

explicitly not to be used after the expiration of the contract at issue. (Id. ¶ 37.)

Sometime in April of 2014, as part of a routine review of existing accounts, WebAssign discovered that two user IDs that had been assigned as part of already completed work had been used to access the secured server.<sup>4</sup> (Id. ¶ 52.) After closer examination, WebAssign discovered that the secured server had been systematically accessed since April 2014 by the accounts issued to Mr. Alexander Krutik and another former contracted employee, Michael Kuzmin, which had been inactive since 2009. (Id. ¶¶ 54-56.) WebAssign then deactivated accounts connected with Competentum and Physicon Ltd. (Id. ¶ 57.) After deactivation, a user attempted to log in to the secure server by accessing five of the deactivated accounts within the course of a few minutes. (Id. ¶ 62.)

WebAssign contacted the CEO of Competentum, who admitted that they had accessed the server, claimed that it was done as part of a "content review" that had been commissioned by Cengage, and promised to explain further, which apparently never

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<sup>4</sup>The two accounts at issue were assigned to Alexander Krutik, who had been working for Open Teach, and to Nancy Murphy, which had been issued in 2010 while Ms. Murphy was working for a company named Physicon Ltd., which WebAssign contends is an affiliate of Competentum. Ms. Murphy now works for Competentum. (First Am. Compl. (Doc. 10) ¶ 52.)

happened.<sup>5</sup> (Id. ¶¶ 64-65.) WebAssign has analyzed the access to the servers and the activity by the ID's associated with Competentum and contends that the accounts were attempting to reverse-engineer (or "black box") WebAssign's Parser software by running commands within the WebAssign system to test the functionality of Parser.<sup>6</sup> (Id. ¶ 59). WebAssign discovered notes that had been left on the secured server by these accounts which apparently confirm that testing was occurring. (Id. ¶¶ 60-61.)

WebAssign has also discovered, via online searches, that Competentum and Cengage are attempting to create a competitor to WebAssign, and, according to WebAssign, materials that also confirm the use of WebAssign's proprietary material. The materials make reference to Grading Statements, reference employees whose accounts were used to access the secured server as helping to create the content, and refer to efforts to build a Parser system. (Id. ¶¶ 70-77.)

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<sup>5</sup> Apparently, the CEO of Cengage claimed that Competentum had been hired to obtain a better understanding of some content that WebAssign provides to Cengage. Webassign contends that this content is provided open source to Cengage, and thus access to the secured server would not have been necessary even assuming this claim is true.

<sup>6</sup> By repeatedly entering commands and modifying them systematically, a user could theoretically examine the output given by the system to gain an understanding of how Parser functions, despite the code not being available on the secured server.

## II. ANALYSIS

This court has jurisdiction over the parties pursuant to 28 U.S.C. §§ 1331 and 1332.

Federal Rule of Civil Procedure 65(b) governs the availability of a TRO to preserve the status quo until a hearing on a motion for preliminary injunction can be held. Hoechst Diafoil Co. v. Nan Ya Plastics Corp., 174 F.3d 411, 422 (4th Cir. 1999). This court has the power to issue a TRO before service of the defendant under Fed. R. Civ. P. 4. See 3M Co. v. Christian Invs. LLC, No. 1:11CV627, 2011 WL 3678144, at \*3 (E.D. Va. Aug. 19, 2011) (citing Internatio-Rotterdam, Inc. v. Thomsen, 218 F.2d 514, 516 (4th Cir. 1955)).

The requirements for obtaining temporary and preliminary injunctive relief are the same. See Rogers v. Stanback, No. 1:13CV209, 2013 WL 6729864, at \*1 (M.D.N.C. Dec. 19, 2013) (citing U.S. Dep't of Labor v. Wolf Run Mining Co., 452 F.3d 275, 281 n.1 (4th Cir. 2006)). In order to obtain a TRO, a movant must establish: (1) that it is likely to succeed on the merits of the dispute; (2) that it is "likely to suffer irreparable harm" in the absence of a TRO; (3) that "the balance of equities" tips in its favor; and (4) that an injunction is in the public interest. Winter v. Nat. Res. Def. Council, Inc.,

555 U.S. 7, 20 (2008); Real Truth About Obama, Inc. v. Fed. Election Comm'n, 575 F.3d 342, 346-47 (4th Cir. 2009), vacated on other grounds, 559 U.S. 1089 (2010).

**A. Likelihood of Success on the Merits**

WebAssign discusses three of its claims in its brief in support of its motion. Because this court finds, at this preliminary stage, that the trade secrets claim and the trespass claim support the issuance of a TRO, this order will analyze only those claims for likelihood of success on the merits. Plaintiff bears a heavy burden and must make "'a clear showing' that, among other things, it is likely to succeed on the merits." JAK Prods, Inc. v. Bayer, 616 F. App'x 94, at \*95 (4th Cir. 2015) (quoting Real Truth About Obama, Inc. v. FEC, 575 F.3d 342, 345 (4th Cir. 2009)).

Plaintiff bears a heavy burden and must "make a strong showing of likelihood of success on the merits." Winter v. Natural Res. Def. Council, Inc., 555 U.S. 7, 21 (2008).

**1. Theft of Trade Secrets**

A trade secret is defined in N.C. Gen. Stat. § 66-152(3) as:

[B]usiness or technical information, including but not limited to a formula, pattern, program, device, compilation of information, method, technique, or process that:

- a. Derives independent actual or potential commercial value from not being generally known or readily ascertainable through independent development or reverse engineering by persons who can obtain economic value from its disclosure or use; and
- b. is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

N.C. Gen. Stat. § 66-152(3).

Here, it seems clear that the software code for Grading Statements and Parser qualify as trade secrets.<sup>7</sup> The code for both has commercial value that derives from being proprietary and not generally known<sup>8</sup>, and was on a secured server, with the code for Parser not being available even on that. As such, they qualify as trade secrets.

In order to succeed on a *prima facie* case for misappropriation of a trade secret, Plaintiff must present substantial evidence that "(1) defendant knows or should have known of the trade secret; and (2) defendant has had a specific opportunity to acquire the trade secret." Barr-Mullin Inc. v.

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<sup>7</sup> AIS also contends that the overall coding architecture of the WebAssign system is a trade secret, but because it is not relevant to the case (and it is not clear that AIS is actually alleging it was stolen), it will not be addressed here.

<sup>8</sup> This value is shown, at least in part, by Cengage's apparently repeated efforts to acquire AIS for the specific purpose of obtaining the code for WebAssign.

Browning, 108 N.C. App. 590, 596 (1993) (citing N.C. Gen. Stat. 66-155). Here, it seems that Plaintiff has clearly established these elements.

First, Plaintiff have proffered documented evidence that Defendant knew of the trade secrets at issue in that they were contracted to work on the server that contained them (and were thus exposed to at least the Grading Statements), as well as evidence that they are not only attempting to create their own, but that they also have specifically and repeatedly referenced proprietary terminology from the trade secrets at issue in their internal materials, as well as attempted to break down and replicate the WebAssign internal architecture. (See Decl. of Elena Khvostova ("Khvostova Decl.") (Doc. 13) ¶¶ 54-64.)

As for the second prong, Plaintiff has offered ample evidence that Competentum had a specific opportunity to acquire those trade secrets. Plaintiff has offered documented evidence of repeated and systematic access of its secured server via the use of former contractors that currently work for Competentum or an affiliate, and on top of that, Competentum has admitted to the access. As such, this prong seems clearly met. Given the evidence presented, Plaintiffs have shown a likelihood of success on the merits for their trade secrets claim.

## 2. Computer Trespass

WebAssign's computer trespass claim is also likely to succeed on the merits. Under N.C. Gen. Stat. § 14-458, it is a violation of the statute to use a computer or computer network "without authorization," and with the intent to do any of the following:

- (3) Alter or erase any computer data, computer programs, or computer software.

• • •

- (5) Make or cause to be made an unauthorized copy, in any form, including, but not limited to, any printed or electronic form of computer data, computer programs, or computer software residing in, communicated by, or produced by a computer or computer network.

N.C. Gen. Stat. § 14-458.

"[W]ithout authorization" is defined in the statute as either when the person accessing "has no right or permission of the owner to use a computer," or "the person uses a computer in a manner exceeding the right or permission." Id. (emphasis added).

Here, it seems clear that the employee accounts that were used by Competentum's employees to access the secured server were used beyond the scope of the authorization granted. Those user IDs had been granted only for specific work over a specific

timeframe (see First Am. Compl. (Doc. 10) ¶ 35), and the right to use them expired when the work was completed in August 2012.

WebAssign has further provided evidence that, while accessing the server without permission, they altered and/or erased data within the system, which constitutes the second prong of Computer Trespass. Given that they have what seems to be evidence of unauthorized access, and alteration or deletion of information during that access,<sup>9</sup> Plaintiff has shown a strong likelihood of success on Computer Trespass.

Defendant has presented evidence of a defense to Plaintiff's claims which, if viable, might affect the foregoing analysis. However, at this preliminary stage, this court does not find Defendant's evidence compelling.

Defendant argues that its access to Plaintiff's confidential information was authorized by Cengage, a third-party doing business with Plaintiff. While this allegation may ultimately turn out to be correct, Defendant's claim, when considered in light of Defendant's use of authorizations which do not appear to have been issued for the purposes claimed, their use of older authorizations after some authorizations had

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<sup>9</sup>It was an alteration to some code made by a Competentum account that alerted WebAssign to the improper access in the first place.

been discontinued, and in light of the material accessed, is not persuasive at this preliminary juncture.

Relatedly, Defendant has filed with the court a contract presently existing between Plaintiff and Cengage, and argues that provisions in the contract further support Cengage, and therefore Defendant's authorization to access the trade secret information. While Defendant's interpretation of the contract may ultimately prove correct, this court does not preliminarily read the contract so broadly as Defendant contends.

**B. Irreparable Harm**

It further seems that, at least based on their claim for Misappropriation of Trade Secrets, that Plaintiff will suffer irreparable harm if injunctive relief is not granted. While Plaintiff must make a "clear showing" of immediate and irreparable harm, the loss of permanent relationships with customers and the loss of proprietary information may constitute irreparable harm. See Philips Elecs. N. Am. Corp. v. Hope, 631 F. Supp. 2d 705, 711 (M.D.N.C. 2009). In most instances, courts presume irreparable harm when a trade secret has been misappropriated, see Merck & Co. v. Lyon, 941 F. Supp. 1443, 1455 (M.D.N.C. 1996), and North Carolina courts have explained that

[M]isappropriation of a trade secret is an injury of "such continuous and frequent recurrence that no reasonable redress can be had in a court of law." The very nature of a trade secret mandates that misappropriation will have significant and continuous long-term effects. The party wronged may forever lose its competitive business advantage or, at the least, a significant portion of its market share.

Barr-Mullin, 108 N.C. App. at 597. It seems that all of these concerns are present here. Not only has Competentum apparently taken proprietary information, at least some of it has been published publicly. Further, it appears that Competentum is in the midst of developing a rival software suite that it plans on launching in early 2016, and that it is doing so in concert with an important client of WebAssign's. (See Khvostova Decl., Ex. F (Doc. 13-6); Decl. of Alex Bloom (Doc. 12) ¶¶ 8-22, 26-29, 31.) The damage that could be done to WebAssign's market share and future prospects would be extremely difficult to quantify into a dollar amount, and as such, this court finds that Plaintiff has shown irreparable harm as to their trade secrets claim.<sup>10</sup>

Defendant argues that Plaintiff has delayed in seeking preliminary relief, and therefore a temporary restraining order

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<sup>10</sup> It is unclear whether or not Plaintiff contends that they will suffer irreparable harm as to their other claims, and given the degree to which the claims intertwine and are related to the same set of operative fact, it is unnecessary to address each individually.

is not required. Defendant contends Plaintiff was aware of Defendant's access as early as April, 2014, and certainly by October, 2014. Plaintiff responds that while it was aware of the access, it initially contacted Defendant to determine what had occurred and resolve the matter. Plaintiff only recently discovered that in November, 2014, when Defendant had claimed any unauthorized access was inadvertent, it was at that same time presenting information apparently derived from Plaintiff's trade secret information. This court does not find Defendant's argument presently compelling.

As an initial matter, it is not clear that Defendant has shown or that WebAssign knew that a trade secret was taken or used when the initial unauthorized access was discovered. This court, again preliminarily, finds that WebAssign's discovery of the nature of the access to its servers and potential use of any information derived therefrom, only came later.

The Fourth Circuit has addressed the issue of delay in Candle Factory, Inc. v. Trade Assocs. Group, Ltd., explaining that:

[A]ny delay attributable to plaintiffs in initiating a preliminary injunction request, coupled with prejudicial impact from the delay, should be considered when the question of irreparable harm to plaintiffs is balanced against harm to defendants. [However, 4th Circuit precedent] simply does not

require us to find, as a matter of law, that the plaintiff suffered no irreparable injury because it delayed in initiating its request for a preliminary injunction.

23 F. App'x 134, at \*3 (2001).

**C. Balance of the Equities**

Although it is a close question, this court finds that the balance of the equities also tips in WebAssign's favor. As stated above, it seems clear that WebAssign will undergo significant hardship if Competentum is not prevented from using WebAssign's trade secrets to launch a competing software suite and likely steal a valuable client.

At the very least, it is far less clear what harm will befall Competentum by the issuance of a temporary injunction until a preliminary injunction can be completed. While Competentum may be delayed in launching their software, there is no evidence that time is of the essence in that endeavor, or that they will lose any current business opportunities by the issuance of a temporary injunction.

Further, it should be noted that Competentum was approached by WebAssign and given a chance to explain its actions before the instant suit was filed. The fact that they were either unable or unwilling to do so further tips the balance of equities in WebAssign's favor.

**D. The Public Interest**

Finally, the public interest also favors WebAssign. "Put simply, the public interest favors the protection of trade secrets." Forestry Systems, Inc. v. Coyner, No. 1:11CV295, 2011 WL 1457707, at \*2 (M.D.N.C. Apr. 15, 2011). The public interest is also served by "preventing unethical business behavior." Philips Elecs., 631 F. Supp. 2d at 724. Finally, that interest "disfavors allowing a competitor to drive another competitor out of business by unfairly misappropriating trade secrets." Arminius Schleifmittel GmbH v. Design Indus., Inc., No. 1:06CV00644, 2007 WL 534573, at \*7 (M.D.N.C. Feb. 15, 2007). Here, an issuance of temporary injunctive relief is clearly in the interest of the public given the likelihood of success on the merits as to Plaintiff's trade secrets claim.

**III. CONCLUSION**

For the reasons described herein, this court finds that a Temporary Restraining Order should be issued, returnable within 14 days of the date of this Memorandum Opinion and Order. Because of the limited scope of this Memorandum Opinion and Order and the limited time during which this Memorandum Opinion and Order shall remain effective, this court finds that a bond in the amount of \$10,000.00 shall be sufficient.

This the 25th day of November, 2015.

William L. Ostan, Jr.

United States District Judge